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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/664,616 | 09/19/2003 | Richard S. Goldhor | mediacip-con | 4024 |

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| EXAMINER | |
|---|---|
| CLOUD, JOIYA M | |
| ART UNIT | PAPER NUMBER |
| 2144 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 04/20/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/664,616 | GOLDHOR ET AL. | |
| | Examiner | Art Unit | |
| | Joiya M. Cloud | 2144 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *9/19/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/19/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## *DETAILED ACTION*

1. This action is responsive to the application filed on September 19, 2003. Claims 1-18 represent Method and apparatus for continuous playback of media.

2.

### *Claim Objections*

Claim 5 is states "The client apparatus of claim 5." Claim 5 is objected to because it depends upon itself. Appropriate correction is required.

3.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claim 5** recites the limitation "the graphical user interface" in line 1. There is insufficient antecedent basis for this limitation in the claim.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1-14, 17, and 18** are rejected under 35 U.S.C 103(a) as being unpatentable over Katseff et al. (U.S. Pat No. 5,822,537 in view of Kimura, U.S. Patent No. 5,767,863.

**As per independent claim 1**, Katseff discloses the invention substantially as claimed client apparatus for preparing streaming media received over a non-deterministic delay network for playback or distribution which comprises: a buffer which stores data corresponding to the streaming media **(Figure 1**; a rate determiner that determines the time-scale modification playback rate over an interval to control an amount of data in the buffer **(col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63)**; and a user interface which receives a user requested time-scale modification playback rate **(col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63)**.

However, Katseff does not explicitly disclose a time-scale modification system that time-scale modifies data output from the buffer at a time-scale modification playback rate.

Kimura discloses a time-scale modification system that time-scale modifies data output from the buffer at a playback rate **(Kimura: Figure 3, item 49, col6, lines 15-67)**.

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Kimura's teachings of the video processing technique with the teachings of Katsef for the purpose of providing improved video processing technique which requires less reduction in bandwidth of the video signal **(Kimura: col. 3, lines 44-48).**

**As per claim 2**, Katseff-Kimura further discloses wherein the rate determiner determines the time-scale modification playback rate utilizing the user requested time-scale modification playback rate **(Katseff, col. 15, lines 45-65).**

**As per claim 3**, Katseff-Kimura further discloses wherein the user interface further comprises a graphical interface **(Katseff, col. 13, lines 60-62).**

**As per claim 4**, Katseff-Kimura further discloses wherein the graphical interface further displays one or more of the user requested time-scale modification playback rate, and the time-scale modification playback rate **(Katseff: Figure 5, item 550)**.

**As per claim 5**, Katseff-Kimura further discloses a client apparatus wherein the graphical interface further displays a range of time-scale modification playback rates which are determined to provide uninterrupted playback **(see rejection of claims 3 and 4 above).**

**As per claim 6**, Katseff-Kimura wherein the rate determiner determines the time-scale modification playback rate as a non-linear function of the amount of data **(Katseff:**

**col. 2, lines 45-55 and col. 15, lines 55-63, where the teachings both references disclose balancing the rate at which data is used with the playback rate of audio/video in conjunction with an adaptive control algorithm).**

**As per claim 7**, claims 7 lists all the same elements of claim 1, but in method form rather than apparatus form. Therefore, the supporting rationale of the rejection to claim 1, applies equally as well to claim 7.

**As per claim 8**, claim 8 is substantially the same as claim 7 and thus rejected using the same rationale. Furthermore, regarding wherein the arrival rate is determined using time-stamps for arriving data **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63).**

**As per claim 9**, claim 9 is substantially the same as claim 8 and thus rejected using the same rationale. Furthermore, regarding wherein the arrival rate is determined by monitoring data arrival times and data packet sizes **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63).**

**As per claim 10**, claim 10 is substantially the same as claim 9 and is thus rejected using the same rationale. Furthermore, regarding utilizing time-scale modification to mitigate underflow or overflow in the buffer, or disruption in playback and providing an indication of a current time-scale modification playback rate to the user **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63 and Kimura: col. 3, lines 44-48).**

**As per claim 11**, which further comprises steps of: providing an indication of a user requested time-scale modification playback rate **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63 and Kimura: col. 3, lines 44-48).**

**As per claim 12**, wherein the step of playing back comprises associating a time-scale modification playback rate with each entry in a playback buffer queue **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63 and Kimura: col. 3, lines 44-48).**

**As per claim 13**, wherein the indication comprises a function of recent time-scale modification playback rates **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63 and Kimura: col. 3, lines 44-48).**

**As per claim 14**, wherein the step of utilizing comprising ignoring or modifying the user input time-scale modification playback rate when it would interfere with providing continuous playback **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63 and Kimura: col. 3, lines 44-48).**

**As per claim 17**, claims 17 is substantially the same as claim 15 and is thus rejected using the same rationale. Furthermore regarding wherein the minimum time-scale modification playback rate is determined as a function of the arrival measure, the consumption measure, an amount of data in the buffer, and the time interval **(Katseff col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63).**

**As per claim 18**, Katseff-Kimura teaches a method for playback of streaming media received over a non-deterministic delay network at a client device which comprises steps of: receiving the streaming media at the client device, which client device includes a CPU; playing back the streaming media; determining a measure of CPU availability; determining a time-scale modification playback rate as a function of the measure of CPU availability; and utilizing time-scale modification to prepare the streaming media for playback **(Katseff: col. 9, lines 1-22, col. 60-67, col. 14, lines 1-54, col. 15, lines 15-67 and col. 16, lines 1-63)**.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 15 and 16** are rejected under 35 U.S.C 103(a) as being unpatentable over Katseff-Kimura and further in view of Allen, U.S. Patent No. 5,652,627.

Regarding independent claim 15, Katseff-Kimura discloses the invention substantially as claimed. Katseff-Kimura further discloses a method for receiving the streaming media at the client device; determining the measure of an arrival rate and a measure of a data consumption rate of the received streaming media; determining and determining a measure of mismatch between the arrival measure and the consumption measure. However, Katseff-Kimura does not explicitly disclose and utilizing time-scale modification to mitigate the effects of the mismatch, wherein the step of utilizing comprises determining a maximum time-scale modification playback rate that can be used over a reporting time interval without draining a buffer that receives the streaming media.

In the same field of endeavor (e.g., system and method for reducing jitter in a packet-based transmission network), Allen discloses utilizing time-scale modification to mitigate the effects of the mismatch.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Allen's teachings of system and method for reducing jitter in a packet-based transmission network with the teachings of Katseff-Kimura, for the purpose of preventing jitters in the delivery of data introduced into a network **(Allen: col. 1, lines 66-67 and col. 2, lines 1-7).**

**As per claim 16**, Katseff-Kimura wherein the maximum time-scale modification playback rate is determined as a function of the arrival measure, the consumption measure, an amount of data in the buffer, and the time interval **(Allen: col. 1, lines 40-67 and col. 2, lines 1-7).**

8.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2-4 and 6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,625,655 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences which include the limitation of claims in the instant application drawn toward a user interface which receives a user requested time-scale modification playback rate, would be obvious to incorporate in order to allow a display for the program playback:

| Instant Application 10/664,616 | Patent No. 6,625,655 B2 |
|---|---|
| 1. A client apparatus for preparing streaming media received over a non-deterministic delay network for playback or distribution which comprises: a buffer which stores data corresponding to the streaming media; a time scale modification system that time-scale modifies data output from the buffer at a time-scale modification playback rate; a rate determiner that determines the time-scale modification playback rate over an interval to control an amount of data in the buffer; and a user interface which receives a user requested time-scale modification playback rate. | 1. A client apparatus for preparing streaming media received over a non-deterministic delay network for playback or distribution which comprises: a buffer which stores data corresponding to the streaming media; a buffer monitor which determines an amount of data stored in the buffer; a rate determiner, in response to output from the buffer monitor, that determines a time-scale modification playback rate; and a time-scale modification system, responsive to the time-scale modification playback rate, that time-scale modifies at least a portion of the data in the buffer; wherein the rate determiner determines the time-scale modification playback rate as a non-linear function of the amount of data; wherein T.sub.L is a low threshold value and T.sub.H is a high threshold value of data in the buffer; and For 0<=X<=T.sub.L ; time-scale modification playback rate=Scale*tan h.sup.-1 ((X-T.sub.L)/T.sub.L) For T.sub.L <X<T.sub.H ; time-scale modification playback rate=a predetermined time-scale modification playback rate For T.sub.H <=X<=Max; time-scale modification playback rate=Scale*tan h.sup.-1 ((X-T.sub.H)/(Max-T.sub.H);<br><br>where X is the amount of data in the buffer, Max is the maximum amount of data that can be stored in the buffer, and Scale is `arbitrary scale factor`. |

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joiya Cloud whose telephone number is 571-270-1146. The examiner can normally be reached Monday to Friday from on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3922.

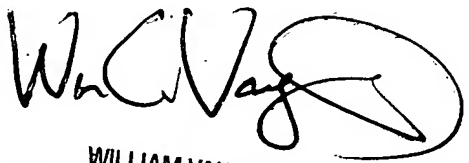
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JMC**

**William J. Vaughn**

**Supervisory Patent Examiner**

**March 22, 2007**



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